

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (currently amended) In a computer system on which one or more applications
2 execute, wherein a first application configuration is defined by first application
3 configuration information, the first application configuration providing for
4 execution of the application, a computer-implemented method for reconfiguring
5 the application without restarting the computer system, comprising:
6 reading second application configuration information defining a reconfigured
7 version of the application;
8 constructing a second application configuration based on the second application
9 configuration information; and
10 providing the second application configuration to an application runtime
11 environment for servicing new requests related to the application while
12 maintaining the first application configuration for servicing, concurrently
13 with new requests, existing requests related to the application.
- 1 2. (original) The method of claim 1, further comprising:
2 destroying the first application configuration upon completion of all application
3 service requests using the first application configuration, whereby
4 computer system resources used to maintain the first application
5 configuration are made available for other uses.
- 1 3. (original) The method of claim 1, further comprising:

2 accessing persistent session information related to an existing application user
3 session to use for servicing new requests from the same user during the
4 existing application user session.

1 4. (original) The method of claim 1, further comprising:
2 determining that the second application configuration successfully initialized prior
3 to providing the second application configuration to the runtime
4 environment for servicing new requests.

1 5. (original) The method of claim 4, wherein the step of determining that the second
2 application configuration successfully initialized is based on a communication
3 from the application runtime environment.

1 6. (original) The method of claim 1, further comprising:
2 receiving a request to reconfigure the computer system; and
3 reconfiguring the computer system in response to the request.

1 7. (original) The method of claim 1, wherein constructing the second application
2 configuration is further based on an application runtime environment
3 configuration.

1 8. (original) The method of claim 7 wherein constructing the second application
2 configuration includes:
3 reading a timestamp associated with the second application configuration
4 information; and
5 determining that the second application configuration information is different than
6 the first application configuration information based on the timestamp.

1 9. (original) The method of claim 1 wherein constructing the second application
2 configuration includes:

3 reading a timestamp associated with a class file referenced in the second
4 application configuration information;
5 determining that the class file has changed based on the timestamp; and
6 constructing the second application configuration, at least in part, according to the
7 changed class file.

1 10. (original) The method of claim 1, further comprising:

2 logging one or more messages related to providing the second application
3 configuration to the computer system.

1 11. (original) The method of claim 1, wherein providing the second application
2 configuration comprises:

3 updating a current configuration reference to reference the second application
4 configuration rather than the first application configuration.

1 12. (original) The method of claim 11, wherein updating the current configuration
2 reference is performed atomically.

1 13. (original) The method of claim 1 wherein the first application configuration is
2 maintained for servicing, without interruption, existing requests related to the
3 application from an existing connection.

1 14. (currently amended) In a computer system on which one or more applications
2 execute, wherein a former application configuration is defined by a first
3 application configuration information and a current application configuration is
4 defined by a second application configuration information, the application
5 configurations providing for execution of the application, a computer-
6 implemented method for processing application service requests, comprising:
7 completing processing a pending first request for an application service that is
8 associated, via a global variable, with the former application
9 configuration;

receiving a second request for an application service;
associating, via a global variable, the second request with the current application
configuration;
accessing the second application configuration information defining the current
application configuration; and
processing the second request according to the second application configuration
information.

15. (original) The method of claim 14 wherein the pending first request and the
second request originate from the same user session, and wherein completing
processing the pending first request and processing the second request are
performed without restarting the computer system.

16. (original) The method of claim 14, further comprising:
determining whether the first application configuration information is referenced
by at least one pending process; and
deleting the first application configuration information from the computer system
in response to determining that the first application configuration
information is not referenced by at least one pending process.

17. (original) The method of claim 16, wherein the first application configuration
information occupies one or more blocks of memory, and wherein deleting the
first application configuration comprises:
releasing the one or more blocks of memory.

18. (original) The method of claim 16, wherein determining whether the first
application configuration information is referenced by at least one pending
process comprises:

determining whether a reference count is equal to a predetermined value
indicating that no processes are referencing the first application
configuration information.

19. (currently amended) In a computer system on which one or more applications
execute, wherein a plurality of application configurations are defined by a
plurality of associated application configuration information and one application
configuration of the plurality of application configurations is the current
configuration associated with a current version of a first application and two or
more other application configurations of the plurality of application configurations
are former configurations associated with former versions of the first application,
a computer-implemented method for processing application service requests,
comprising:
completing processing one or more pending requests for application services that
are associated with any of the former configurations according to former
configuration information that is associated with each of the one or more
pending requests;
while completing processing the one or more pending requests,
~~upon~~ receiving a new request for an application service,
accessing current application configuration information defining the
current configuration; and
processing the new request according to the current application
configuration information.

20. (currently amended) In a computer system on which one or more applications
execute, wherein a current application configuration is defined by a first
application configuration information, the current configuration providing for
execution of the application, a computer-readable medium comprising instructions

5 which, when executed by one or more processors, cause the one or more
6 processors to reconfigure the application without restarting the computer system,
7 by performing the steps of:
8 reading second application configuration information defining a reconfigured
9 version of the application;
10 constructing a second application configuration based on the second application
11 configuration information; and
12 providing the second application configuration to an application runtime
13 environment for servicing new requests related to the application from a
14 new connection while maintaining the first application configuration for
15 servicing, concurrently with new requests, existing requests related to the
16 application from an existing connection.

1 21. (original) The computer readable medium of claim 20, wherein execution of the
2 instructions by the one or more processors causes the one or more processors to
3 perform:

4 destroying the first application configuration upon completion of all application
5 service requests using the first application configuration, whereby
6 computer system resources used to maintain the first application
7 configuration are made available for other uses.

1 22. (original) The computer readable medium of claim 20, wherein execution of the
2 instructions by the one or more processors causes the one or more processors to
3 perform :

4 accessing persistent session information related to an existing application user
5 session to use for servicing new requests from the same user during the
6 existing application user session.

1 23. (original) The computer readable medium of claim 20, wherein execution of the
2 instructions by the one or more processors causes the one or more processors to
3 perform:
4 determining that the second application configuration successfully initialized prior
5 to providing the second application configuration to the runtime
6 environment for servicing new requests related to the application.

1 24. (original) The computer readable medium of claim 23, wherein execution of the
2 instructions by the one or more processors causes the one or more processors to
3 perform the step of determining that the second application configuration
4 successfully initialized based on a communication from the application runtime
5 environment.

1 25. (original) The computer readable medium of claim 20, wherein execution of the
2 instructions by the one or more processors causes the one or more processors to
3 perform:
4 receiving a request for reconfiguring the computer system absent any changes to
5 the computer system configuration; and
6 reconfiguring the computer system based on the second application configuration
7 in response to the request.

1 26. (original) The computer-readable medium of claim 20, wherein constructing a
2 second application configuration is based on the second application configuration
3 information and an application runtime environment configuration, and wherein
4 execution of the instructions by the one or more processors causes the one or more
5 processors to perform providing the second application configuration to the server
6 for servicing new requests related to the application according to the second
7 application configuration.

1 27. (original) The computer-readable medium of claim 26 wherein execution of the
2 instructions by the one or more processors causes the one or more processors to
3 perform constructing the second application configuration by performing the steps
4 of:
5 reading a timestamp associated with the second application configuration
6 information; and
7 determining that the second application configuration information is different than
8 the first application configuration information based on the timestamp.

1 28. (original) The computer-readable medium of claim 20 wherein execution of the
2 instructions by the one or more processors causes the one or more processors to
3 perform constructing the second application configuration by performing the steps
4 of:
5 reading a timestamp associated with a class file referenced in the second
6 application configuration information;
7 determining that the class file has changed based on the timestamp; and
8 constructing the second application configuration, at least in part, according to the
9 changed class file.

1 29. (original) The computer readable medium of claim 20, wherein execution of the
2 instructions by the one or more processors causes the one or more processors to
3 perform :
4 logging one or more messages related to providing the second application
5 configuration to the computer system.

1 30. (original) The computer-readable medium of claim 20 wherein execution of the
2 instructions by the one or more processors causes the one or more processors to
3 perform providing the second application configuration by performing the steps
4 of:

5 updating a current configuration reference to reference the second application
6 configuration rather than the first application configuration.

1 31. (original) The computer-readable medium of claim 30 wherein execution of the
2 instructions by the one or more processors causes the one or more processors to
3 perform updating the current configuration reference atomically.

1 32. (currently amended) In a computer system on which one or more applications
2 execute, wherein a former application configuration is defined by a first
3 application configuration information and a current application configuration is
4 defined by a second application configuration information, the application
5 configurations providing for execution of the application, a computer-readable
6 medium comprising instructions which, when executed by one or more
7 processors, cause the one or more processors to process application service
8 requests, by performing the steps of:

9 completing processing a pending first request for an application service that is
10 associated, via a global variable, with the former application

11 configuration;

12 receiving a second request for an application service;

13 associating, via a global variable, the second request with the current application
14 configuration;

15 accessing the second application configuration information defining the current
16 application configuration; and

17 processing the second request according to the second application configuration
18 information.

1 33. (original) The computer-readable medium of claim 32 wherein the pending first
2 request and the second request originate from the same user session, and wherein
3 execution of the instructions by the one or more processors causes the one or more

4 processors to perform completing processing the pending first request and
5 processing the second request without having to restart the computer system.

1 34. (original) The computer-readable medium of claim 32 wherein execution of the
2 instructions by the one or more processors causes the one or more processors to
3 perform the steps of:
4 determining whether the first application configuration information is referenced
5 by at least one pending process; and
6 deleting the first application configuration information from the computer system
7 in response to determining that the first application configuration
8 information is not referenced by at least one pending process.

1 35. (original) The computer-readable medium of claim 34, wherein the first
2 application configuration information occupies one or more blocks of memory,
3 and wherein execution of the instructions by the one or more processors causes
4 the one or more processors to perform deleting the first application configuration
5 by performing :
6 releasing the one or more blocks of memory.

1 36. (original) The computer-readable medium of claim 34, wherein execution of the
2 instructions by the one or more processors causes the one or more processors to
3 perform determining whether the first application configuration information is
4 referenced by at least one pending process by performing :
5 determining whether a reference count associated with the first application
6 configuration information is equal to a predetermined value indicating that
7 no processes are referencing the first application configuration
8 information.

1 37. (original) The computer readable medium of claim 36, wherein execution of the
2 instructions by the one or more processors causes the one or more processors to

3 perform determining that the second application configuration successfully
4 initialized based on a communication from an application runtime environment.
5 38. (currently amended) An apparatus on which one or more applications execute, wherein
6 a first application configuration is defined by first application configuration information,
7 the first application configuration providing for execution of the application, the
8 apparatus comprising:
9 a network interface;
10 a memory; and
11 one or more processors connected to the network interface and the memory, the one or
12 more processors configured for
13 reading second application configuration information defining a reconfigured version of
14 the application;
15 constructing a second application configuration based on the second application
16 configuration information; and
17 providing the second application configuration to an application runtime environment
18 for servicing new requests related to the application while maintaining the first application
19 configuration for servicing, concurrently with new requests, existing requests related to the
20 application.